

# Low Pass Filter

## VLFX-950

50Ω DC to 950 MHz (40 dB Isolation up to 20 GHz)

### Maximum Ratings

Operating Temperature -55°C to 100°C

Storage Temperature -55°C to 100°C

RF Power Input\* 10W max. at 25°C

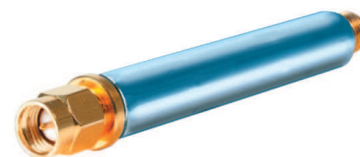
\*Passband rating, derate linearly to 3.5W at 100°C ambient.  
Permanent damage may occur if any of these limits are exceeded.

### Features

- very good isolation, 40 dB up to 20 GHz
- 21 sections
- excellent power handling, 10W
- temperature stable LTCC internal structure
- re-entry frequency > 20 GHz
- rugged unibody construction
- protected by US patent 6,943,646

### Applications

- harmonic rejection
- transmitters/receivers
- lab use
- test instrumentation



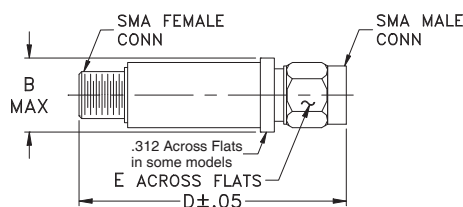
CASE STYLE: FF1118

Connectors	Model	Price	Qty.
SMA	VLFX-950	\$39.95 ea.	(1-9)

**+RoHS Compliant**

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

### Outline Drawing



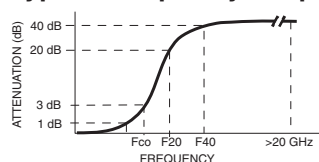
### Outline Dimensions (inch mm)

B	D	E	wt.
.410	2.67	.312	grams
10.41	67.82	7.92	17.0

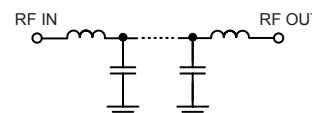
### Low Pass Filter Electrical Specifications @ 25°C

MODEL NO.	PASSBAND (MHz) (Loss < 1.2dB) Max.	Fco, MHz Nom (Loss 3 dB) Typ	STOPBAND (MHz) (Loss, dB)		VSWR (:1)		NO. OF SECTIONS
			F20 Min.	F40 Typ.	Stopband Typ.	Passband Typ.	
VLFX-950	DC-950	1400	1750	2250-20000	10	1.3	21

### Typical Frequency Response

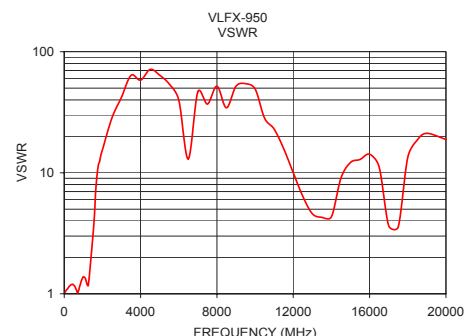
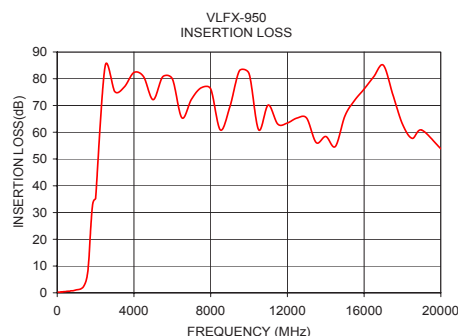


### Functional Schematic



### Typical Performance Data @ 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	0.27	1.03
300	0.42	1.17
600	0.60	1.11
950	1.02	1.34
1100	1.21	1.34
1275	1.67	1.23
1400	2.68	1.99
1550	5.78	3.72
1650	12.61	7.15
1750	24.55	10.59
2250	60.02	21.95
4000	82.32	58.20
6000	79.95	39.93
8000	76.22	51.88
10000	81.90	49.29
12000	63.46	10.03
14000	58.41	4.32
16000	76.13	14.24
18000	63.01	13.40
20000	53.82	18.85



**Mini-Circuits**  
ISO 9001 ISO 14001 AS 9100 CERTIFIED

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Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

REV. B  
M131810  
VLFX-950  
EDU-0399  
ED-11930A/13  
URJ/RS/CP  
130319  
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Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp).